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# Use Your Resources

- <http://www.hunterindustries.com/>
- <http://www.rainbird.com/>
- <http://www.toro.com/en-us/pages/default.aspx>
- <http://www.orbitonline.com/>
- <http://turf.ufl.edu/>















# How long to Water?

- Hunter PGP
- Hunter MP Rotater
- Popups
- Rainbird
- Toro
- Orbit
- KB
- Impact sprinklers

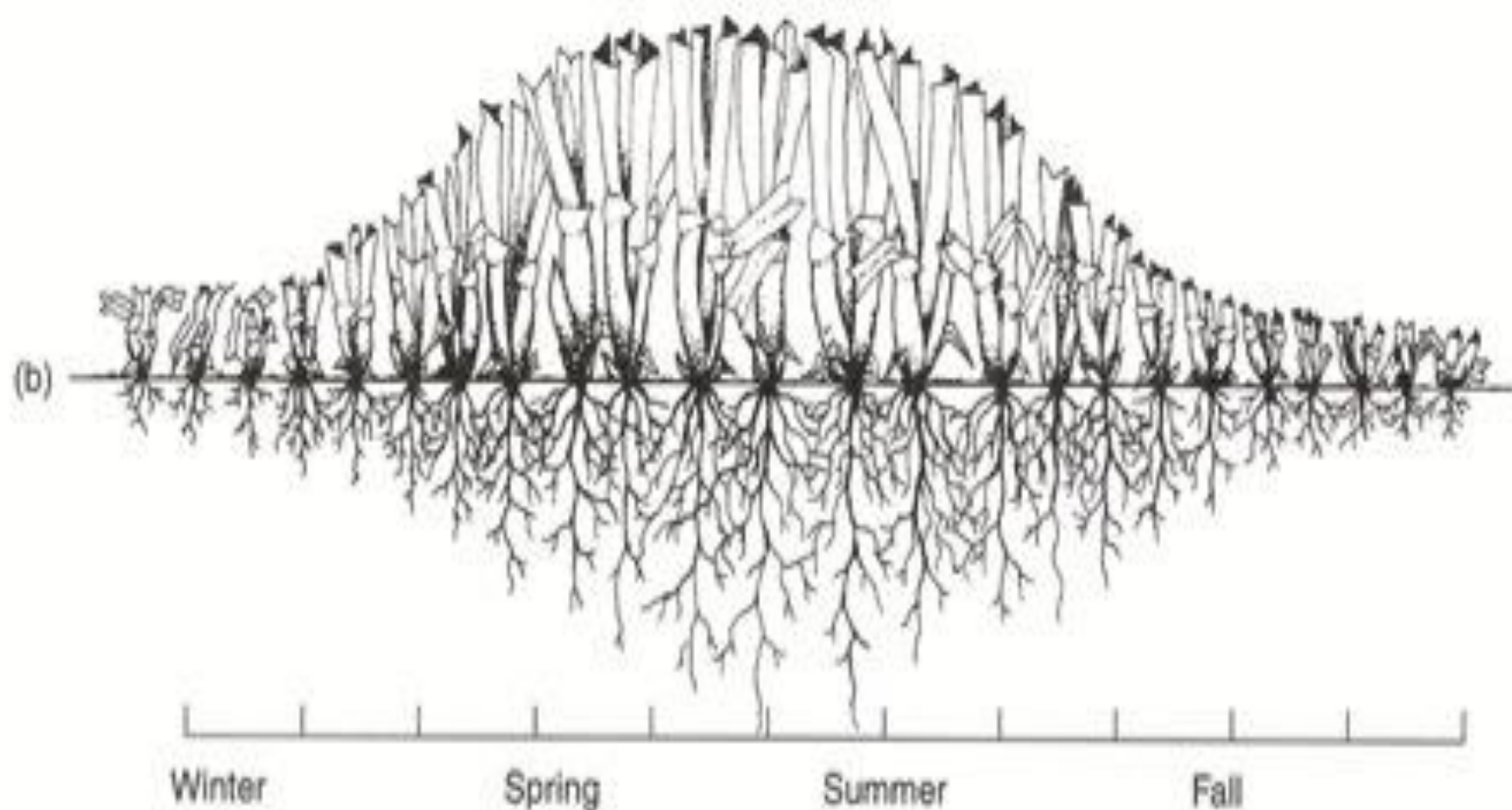
- Different times for each type of head
- Avoid mixing heads in the same zone
- Use the catch can test
- $\frac{1}{2}$ " to  $\frac{3}{4}$ " of water during each irrigation event
- Watering restrictions







Seasonal shoot and root growth of warm-season turfgrasses. (Turgeon, 2002)





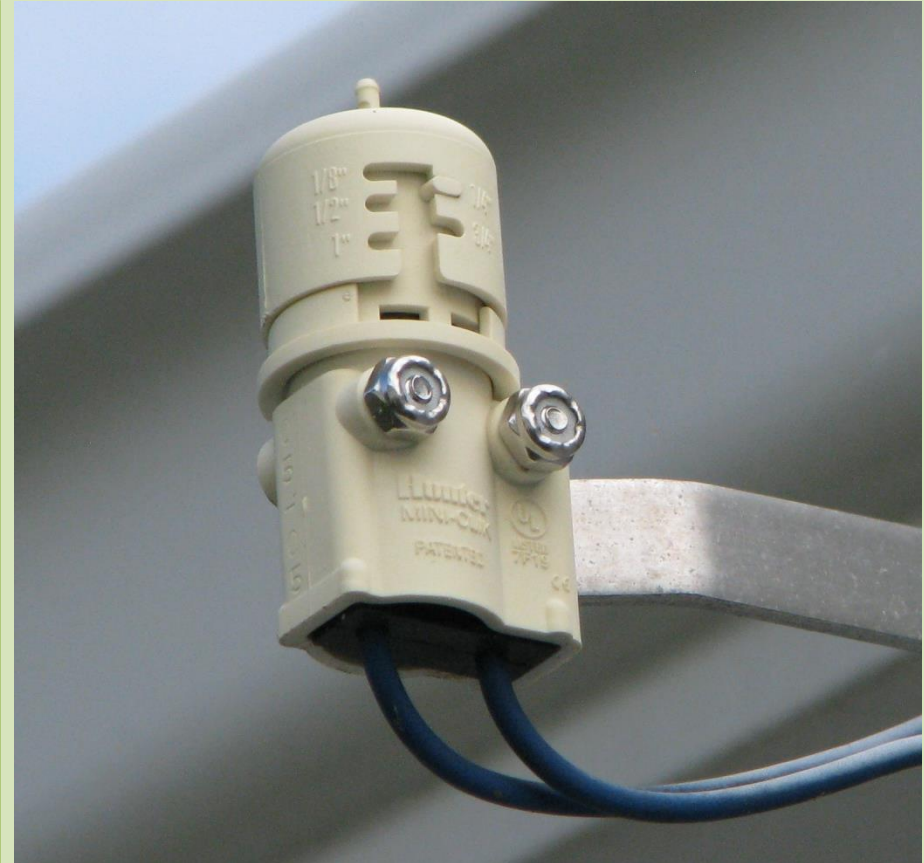
- How Does It Work?
- 6 or 9 Zones
- Valves
- Sprinklers
- Rain Sensor
- Battery
- Know Your Zones





# Rain Sensors

- Located at on the roofline
- Turns system off after adequate rain
- Inspect yearly to see if it functioning correctly









SolarSync

Hunter®

9 36 →

AM  
PM  
24 hr  
Start  
End



TIME



TYPE



REGION



WATER



Hunter® Pro-C

P C C S E R I E S

GND



Hunter®

mer

1-003

60Hz (Wh/Bik)

1/25A (Yel/Yel)



E196647

BY ALLTRONICS 3008



# Soil Moisture Sensors

- Acclima
- Rainbird
- Toro





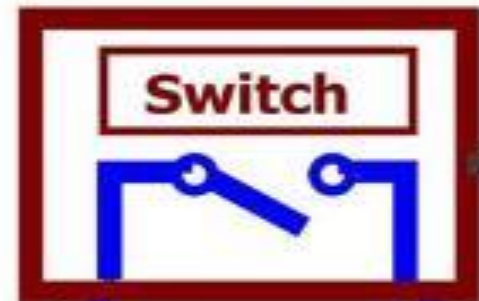
## SMS Controller



## Timer

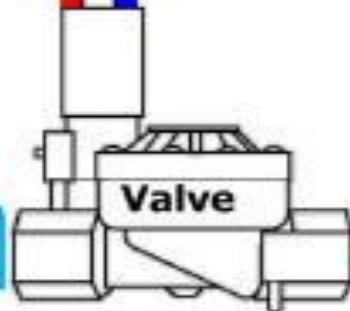


## Switch



Common

Hot



Water



Soil Moisture Sensor (SMS)













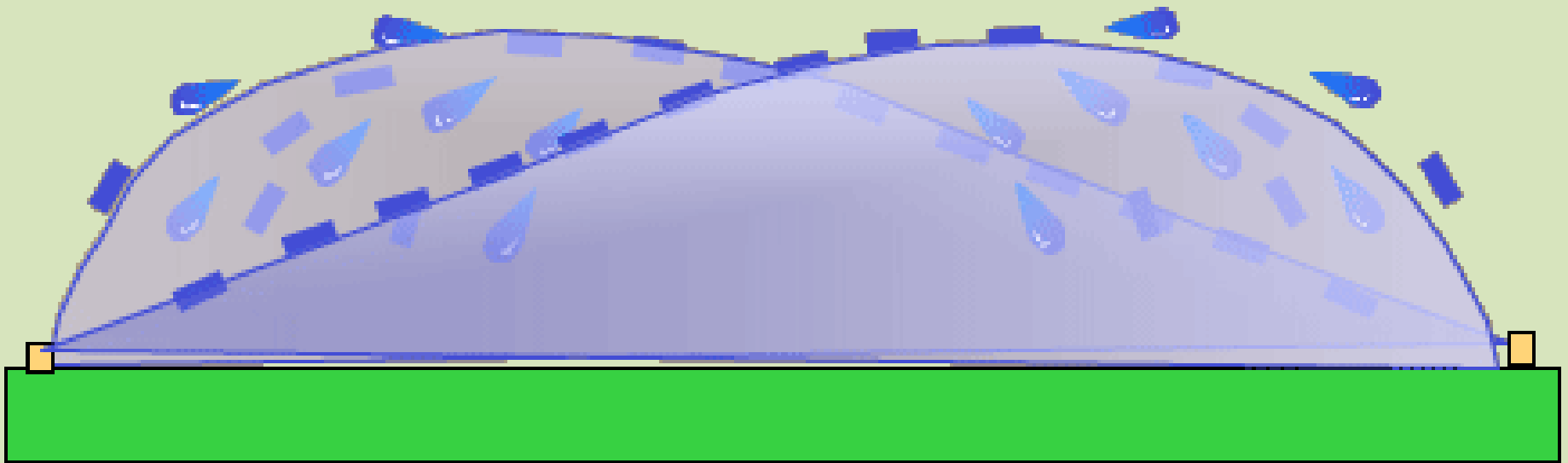


# No Geysers in The Villages





# Head to Head Coverage





Avoid irrigating in the middle of the day





# Repair Leaks and Broken Piping













# Avoid Blocking Irrigation Heads





# Avoid Blocking Irrigation Heads





# Clean Donuts









# Irrigation Problem





# Irrigation Problem?





# Irrigation Problem?





# Watering Efficiently

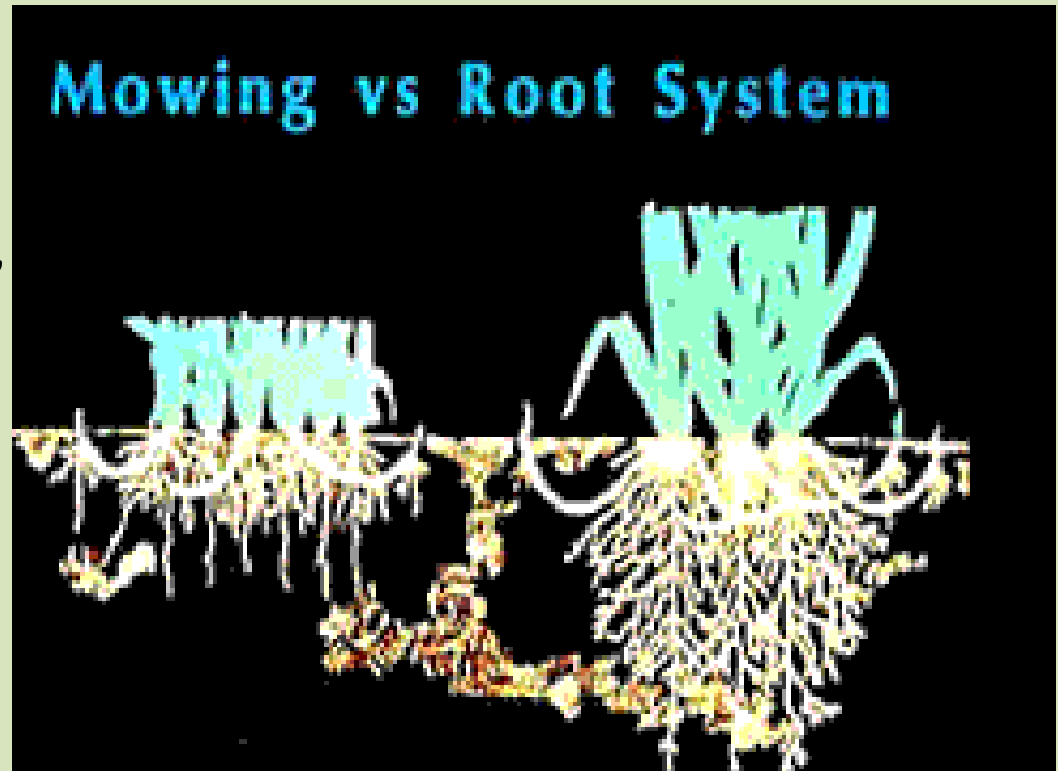
- Promotes deep roots
- Reduces pests and diseases
- Reduces thatch
- Water from 2-7 a.m.





# Mow at the Right Height

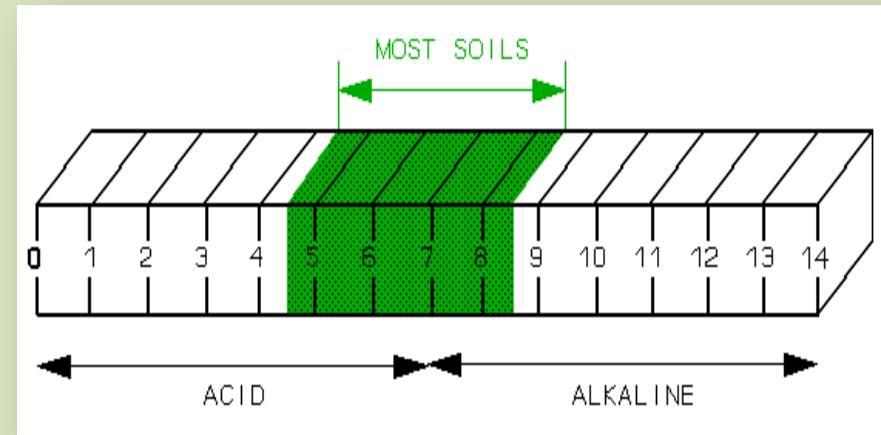
- Empire Zoysia grass  
*2.0-2.5 inches*
- St. Augustine “Florata”  
*3.5 to 4.0 inches*





# Right Plant, Right Place

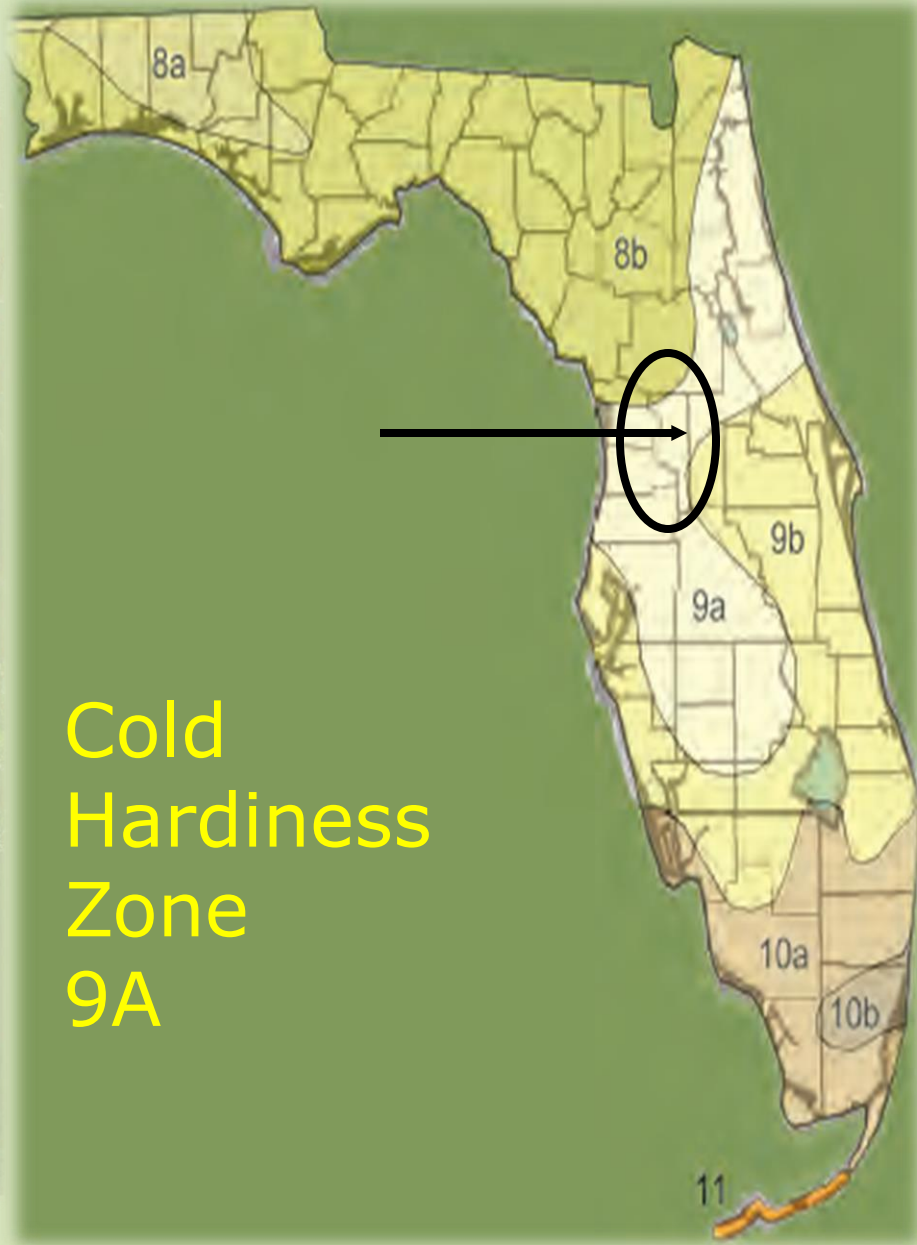
- Site Selection
- pH test prior to planting
- Compost
- Well-drained soil
- Full Sun











Cold  
Hardiness  
Zone  
9A



# Invasive Plants

- Skunk vine
- Air potato



- Water hyacinth







08/26/2005







# Common Mistakes

- Over-planting
- Plants planted too deeply
- Not sterilizing pruning tools
- Using chainsaws on palms









# Inspect Roots

Root ball should stay intact

Not root bound

Check distribution of roots

B&B make sure root ball is not cracked







Root Bound

Shave Roots





# The “New” Planting Hole

root flare might be visible on certain trees

point where top-most root emerges from trunk within 2 inches of surface

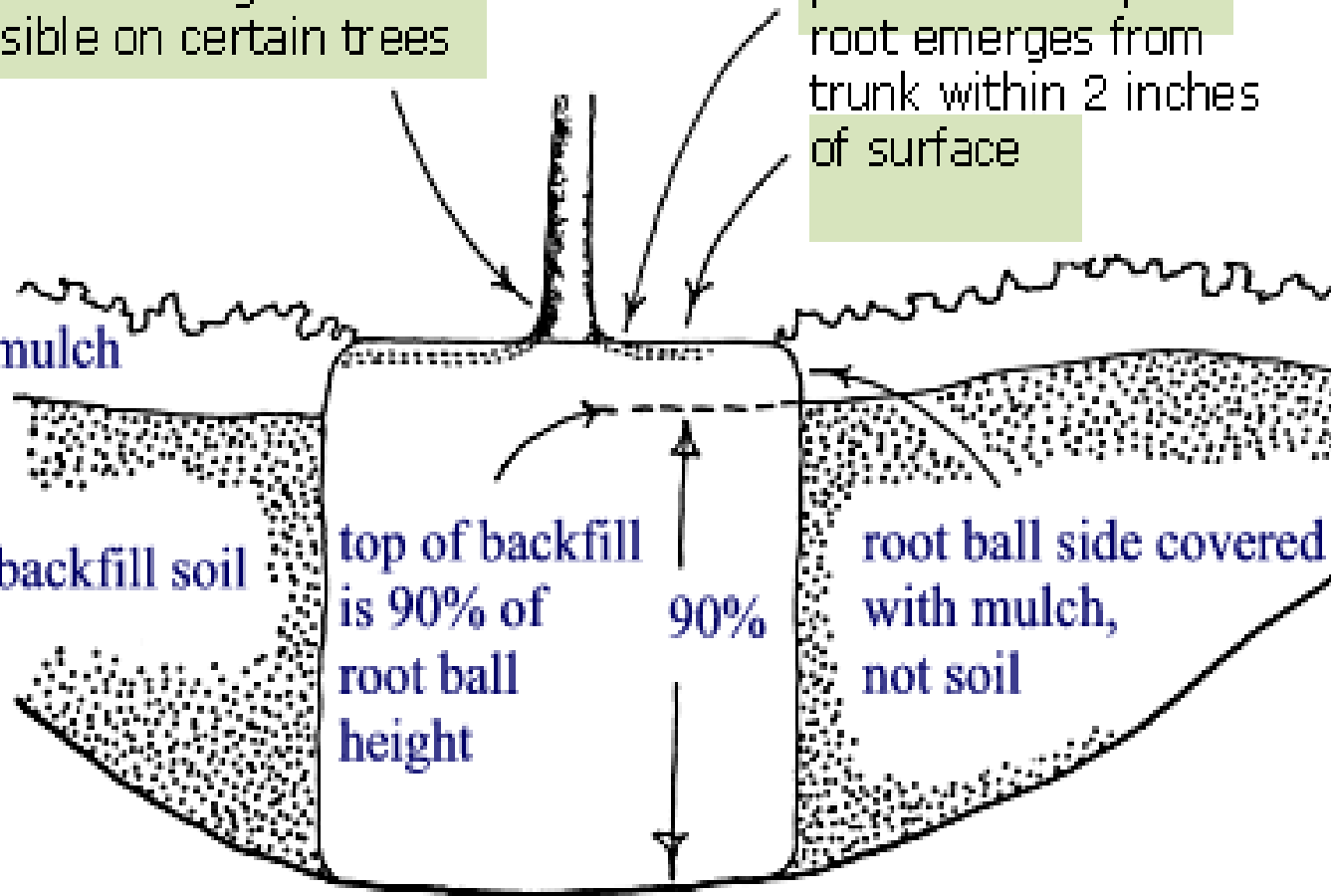
mulch

backfill soil

top of backfill is 90% of root ball height

90%

root ball side covered with mulch, not soil

















# Common Mistakes

- Improper Pruning
- Plants are planted too close to the house





# Fertilize Appropriately

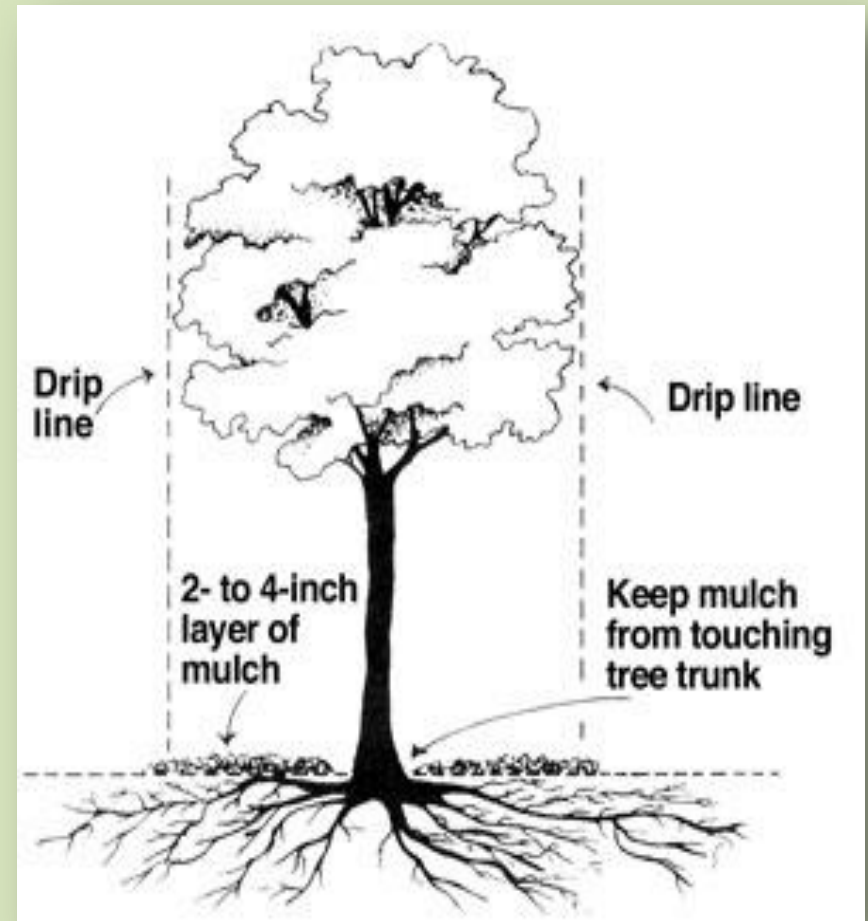
- Slow or controlled release fertilizer
- Use iron in the summer
- Avoid weed & feeds
- Roses, palms, azaleas





# Fertilize Appropriately

- Apply around drip line  
March-September





# 15-0-15

## Tallahassee Nursery

I.D. #: 16-354-02

PROD #: 9177

TOTAL NITROGEN (N)	15.00%*
2.56% Ammoniacal Nitrogen	
1.38% Nitrate Nitrogen	
3.56% Urea Nitrogen	
7.50% Water Insoluble Nitrogen	
SOLUBLE POTASH ( $K_2O$ )	15.00%
CALCIUM (Ca)	7.50%
TOTAL MAGNESIUM (Mg)	1.00%
1.00% Water Soluble Magnesium (Mg)	
SULFUR (S)	3.20%
3.20% Combined Sulfur (S)	
	0.12%



# Guaranteed Analysis

[Redacted] Lawn Fertilizer

32-0-10

F 643

with 2% Iron

Total Nitrogen (N) ..... 32%

0.9% ammoniacal nitrogen

17.3% urea nitrogen

12.6% other water soluble nitrogen\*

1.2% water insoluble nitrogen\*

Soluble Potash ( $K_2O$ ) ..... 10%

Sulfur (S) ..... 4%

4.0% combined sulfur (S)

Iron (Fe) (Total)\*\* ..... 2%

Derived from: urea, methyleneureas, potassium sulfate, ammonium sulfate, iron oxide.

\*Contains 10.5% slowly available methylenediurea, dimethylenetriurea and water insoluble nitrogen.

\*\*No claim for iron in Colorado.



# 8-2-12

## **LESCO<sup>®</sup> Palm & Tropical Ornamental Fertilizer**

### **GUARANTEED ANALYSIS**

<b>TOTAL NITROGEN (N)</b> .....	8.00%
0.78% Ammoniacal Nitrogen	
7.22% Urea Nitrogen*	
<b>AVAILABLE PHOSPHATE (P<sub>2</sub>O<sub>5</sub>)**</b> .....	2.00%
<b>SOLUBLE POTASH (K<sub>2</sub>O)***</b> .....	12.00%
<b>MAGNESIUM (Mg) Total</b> .....	4.00%
3.00% Water Soluble Magnesium (Mg)	
<b>SULFUR (S) Total</b> .....	25.00%
9.50% Free Sulfur (S)	
15.50% Combined Sulfur (S)	
<b>BORON (B) Total</b> .....	0.15%
0.15% Water Soluble Boron (B)	
<b>COPPER (Cu) Total</b> .....	0.05%
0.05% Water Soluble Copper (Cu)	
<b>IRON (Fe) Total</b> .....	0.15%
0.15% Chelated Iron (Fe)	
<b>MANGANESE (Mn) Total</b> .....	2.00%
2.00% Water Soluble Manganese (Mn)	
<b>ZINC (Zn) Total</b> .....	0.15%
0.15% Water Soluble Zinc (Zn)	

**DERIVED FROM:** Polymer Coated Sulfur Coated Urea, Polymer Coated Sulfur Coated Sulfate of Potash, Magnesium Sulfate (Kieserite), Copper Sulfate, Manganese Sulfate, Zinc Sulfate, Polymer Coated Sulfur Coated Ammonium Phosphate, Iron EDTA, Sodium Borate

\*5.40% Slowly Available Urea Nitrogen from Polymer Coated Sulfur Coated Urea.

\*\*1.30% Slowly Available Phosphate from Polymer Coated Sulfur Coated Ammonium Phosphate

\*\*\*8.10% Slowly Available Potassium from Polymer Coated Sulfur Coated Sulfate of Potash



# Mulch

- Organic Mulch
- Gravel, Rock
- Rubber Mulch
- No Cypress Mulch
- Mulch to the drip line





# Mulching

- “Volcano Mulching”
- Apply a 2-3” Layer
- Chokes roots
- Pests
- Root rot





# Attracting Wildlife









# Managing Pests Responsibly

- Integrated Pest Management
- Beneficial Insects
- Scout
- Avoid routine applications of pesticides







Jim Davis













Spanish Moss



Ball Moss



Lichen



# Do You Need to Spray?





# Handpick Pests





# Follow the Label-It is the Law!







10/07/2012 21:55



# Recycle





*Stormwater Runoff*- Rainwater that flows off yards, roads and parking lots, carrying pollutants into our waterways.





- **Elevated nutrients can cause:**
  - Polluted drinking water
  - Excessive aquatic plant growth
  - Lower dissolved oxygen levels
  - Fish Kills





# Yaupon Holly

*Ilex vomitoria*





# Walter's Viburnum





# Asiatic Jasmine





# Blanket Flower





# Salvia 'Hot Lips'





# Salvia





# Rosin Weed





# Bulbine 'Hallmark'





# European Fan Palm





# Coral Honeysuckle





# Sabal Palmetto





# Florida-Friendly Landscaping™ PROGRAM



## Florida Yards & Neighborhoods

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The Florida Yards and Neighborhoods (FYN) Program is designed to educate homeowners and other community members about the benefits of Florida-friendly landscaping with the help of **The Nine Principles to reach the goal of a Florida-Friendly Yard**

Knowing ways to conserve water and energy in the landscape is a positive step towards helping the environment for future generations to enjoy! You not only reduce your maintenance, but minimize the amount of water, fertilizer and pesticides that need to be applied to your yard.

- ▶ Getting Started with Florida-Friendly Landscaping™
- ▶ Florida-Friendly Plant Resources
- ▶ Florida-Friendly Lawn Care
- ▶ Florida-Friendly Irrigation
- ▶ Florida-Friendly Fertilizing

[Sumter.ifas.ufl.edu](http://Sumter.ifas.ufl.edu)